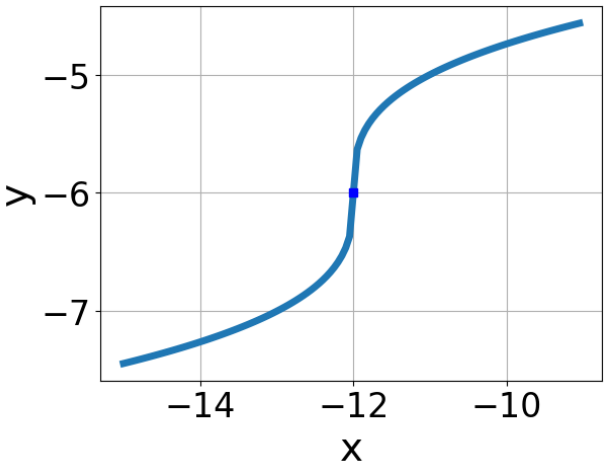
1. Choose the equation of the function graphed below.



A. $f(x) = \sqrt{x+12} - 6$

B. $f(x) = \sqrt{x-12} - 6$

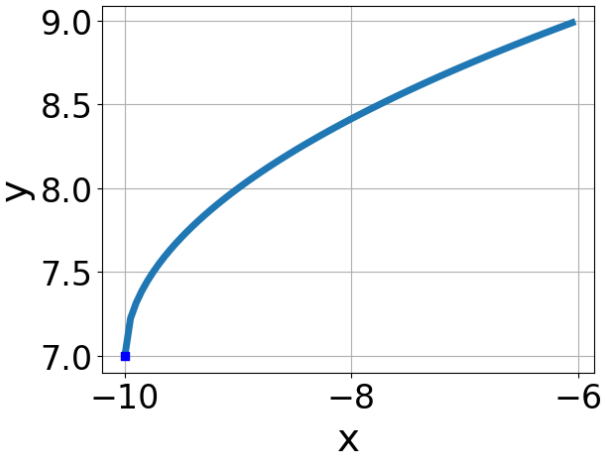
C. $f(x) = -\sqrt{x-12} - 6$

D. $f(x) = -\sqrt{x+12} - 6$

E. None of the above

---

2. Choose the equation of the function graphed below.



A. $f(x) = -\sqrt{x-10} + 7$

B. $f(x) = \sqrt{x-10} + 7$

C. $f(x) = \sqrt{x+10} + 7$

D. $f(x) = -\sqrt{x+10} + 7$

E. None of the above

---

3. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{14x^2 - 12} - \sqrt{-13x} = 0$$

A. $x \in [-2.71, -0.05]$

B. $x \in [-0.03, 1.04]$

C. $x_1 \in [-0.03, 1.04]$ and $x_2 \in [1.18, 2.2]$

D. All solutions lead to invalid or complex values in the equation.

E. $x_1 \in [-2.71, -0.05]$ and $x_2 \in [-0.34, 0.79]$

---

4. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{5x - 8} - \sqrt{8x - 5} = 0$$

A. $x \in [-3, 0]$

B. All solutions lead to invalid or complex values in the equation.

C. $x_1 \in [-0.38, 5.62]$ and $x_2 \in [0.6, 3.6]$

D. $x \in [-7.33, -1.33]$

E. $x_1 \in [-3, 0]$ and $x_2 \in [0.6, 3.6]$

---

5. What is the domain of the function below?

$$f(x) = \sqrt[4]{-5x + 8}$$

A. $(-\infty, \infty)$

B. $[a, \infty)$, where $a \in [1.46, 1.79]$

C. $[a, \infty)$, where $a \in [0.35, 1.05]$

D. $(-\infty, a]$, where $a \in [0.2, 0.8]$

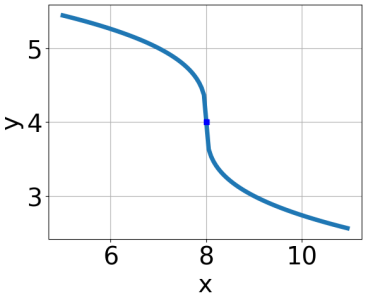
E. $(-\infty, a]$, where $a \in [1.2, 3]$

---

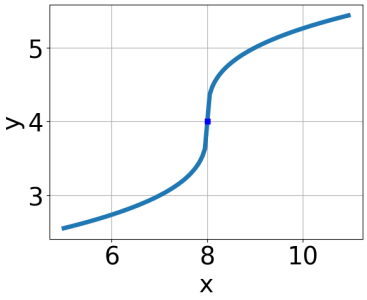
6. Choose the graph of the equation below.

$$f(x) = -\sqrt[3]{x - 8} + 4$$

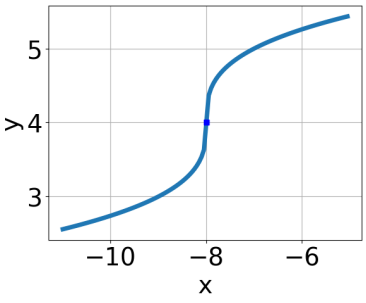
A.



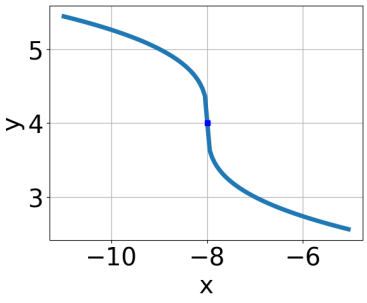
C.



B.



D.



E. None of the above.

---

7. What is the domain of the function below?

$$f(x) = \sqrt[7]{8x - 9}$$

A. $(-\infty, \infty)$

B. The domain is $[a, \infty)$, where $a \in [0.92, 1.31]$

C. The domain is $(-\infty, a]$, where $a \in [0.71, 1.01]$

D. The domain is $(-\infty, a]$, where $a \in [1.03, 1.25]$

E. The domain is $[a, \infty)$, where $a \in [0.86, 0.94]$

---

8. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{9x^2 + 6} - \sqrt{15x} = 0$$

A. $x \in [0.2, 0.91]$

B. $x_1 \in [0.2, 0.91]$ and $x_2 \in [0.3, 4.3]$

C. $x \in [0.98, 1.04]$

D. $x_1 \in [-1.07, -0.43]$ and $x_2 \in [-2.5, 0.1]$

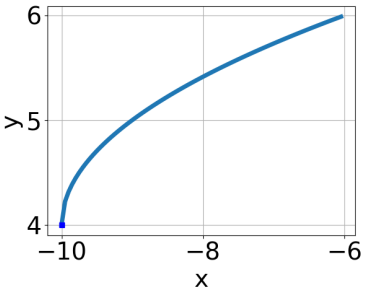
E. All solutions lead to invalid or complex values in the equation.

---

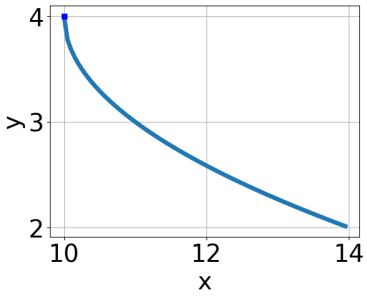
9. Choose the graph of the equation below.

$$f(x) = \sqrt{x - 10} + 4$$

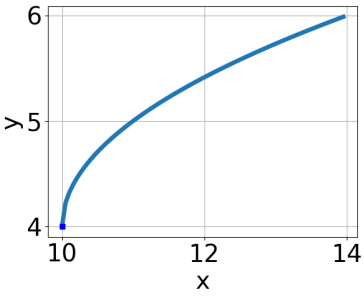
A.



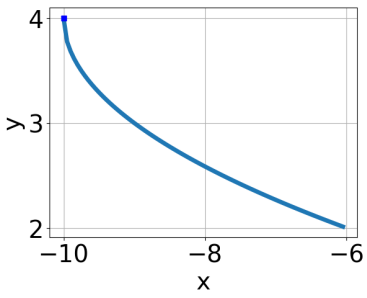
C.



B.



D.



E. None of the above.

---

10. Solve the radical equation below. Then, choose the interval(s) that the solution(s) belongs to.

$$\sqrt{8x+8} - \sqrt{-2x+7} = 0$$

A. $x \in [-2.14, -1.24]$

B. $x \in [-0.76, 0]$

C. $x_1 \in [-1.48, -0.65]$ and $x_2 \in [1.5, 6.5]$

D. All solutions lead to invalid or complex values in the equation.

E. $x_1 \in [-1.48, -0.65]$ and $x_2 \in [-0.1, 1.9]$